

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Initially, Applicants express their appreciation to Examiner Jennifer Steele and Examiner Elizabeth Cole for their courtesy and assistance provided to the Applicants representative during the personal interview held on October 25, 2006.

Claims 9 and 18 have been amended as discussed during the interview. The phrase "except for conjugate fiber" has been removed from the claims.

Accordingly, the rejection of claims 9 and 18 under 35 USC 112, first paragraph, as failing to comply with the written description requirement is deemed to be overcome.

During the interview we discussed the difference between the Goettmann membrane and the claimed membrane. The Goettmann membrane represents a first generation not-high pressure filtration membrane. The claimed membrane represents a second generation high pressure filtration membrane. The Goettmann membrane cannot operate under high pressure filtration, whereas the claimed membrane is excellent at high pressure filtration.

In the Examiner Interview Summary, the Examiner has indicated that the Applicant may submit evidence which compares the prior art product and the claimed product to show the criticality of (1) heat shrinkage stress property of 0.1-0.6 g/d and (2) the breaking length at an elongation of 5%.

The Office has previously contended that it would have been obvious to one having ordinary skill in the art at the time the invention was made to create a support member having a maximum pore size of 42 micrometers or less and having a polyester fiber present in the amount of 50-70% by weight because discovering the optimal or workable ranges involved is routine. However, if the prior art does not teach that a "heat shrinkage stress property of 0.1-0.6 g/d" and a "breaking length at an elongation of 5%" are critical to create a support member having a maximum pore size of 42 micrometers or less, then it would not be obvious to a skilled artisan to vary these conditions and create the claimed invention. In other words, the discovery of new

parameters which are critical to the properties of an invention cannot be considered obvious from the prior art. In this case, the inventors have discovered that by controlling the two parameters of (1) a "heat shrinkage stress property of 0.1-0.6 g/d" and (2) a "breaking length at an elongation of 5%", a support member having a maximum pore size of 42 micrometers or less can be obtained which is excellent for high pressure filtration.

The Examiner indicated that if the experiments show that the heat shrinkage stress property and breaking length are newly discovered critical parameters which result in improved ultrafiltration properties of the membrane, the rejection would be withdrawn.

There is enclosed herewith a Rule 132 Declaration to show that the closest prior art does not have a maximum pore size of 42 μm or less and that a "heat shrinkage stress at 200°C of 0.1-0.6 g/d" and a "mean value of breaking length at an elongation of 5%" are critical to achieve the desired maximum pore size.

Japanese Patent Publication No. 35009/1993 quoted in the present specification as one of the closest prior arts corresponds to Shinjou et al. (USP 4,795,559), which was cited in the previous Office Action. With respect to Shinjou et al., we have already filed a Rule 132 Declaration pursuant to 37 CFR 1.132. Therefore, the present Declaration uses the result of the experiments of declaration with respect to Shinjou et al.

The importance (criticality) of mean value of breaking length at an elongation of 5% may be understood by the following.

Breaking length at an elongation of 5% was measured with respect to the conventionally available support members and nonwoven fabric to show less than 3.8 km as described on the bottom line of page 9, line 5, and page 10 of the specification.

One company has succeeded in a high pressure filtration of 100 kg/cm² or more with respect to reverse osmosis semipermeable membrane. The Applicant provides the company with the support member used for the high pressure filtration. One of physical properties of the support member required by this company is 4.0 km or more in size stability, that is, mean value of breaking length at an elongation of 5%.

In view of the foregoing, the rejection of claims 9-11 and 17-20 under 35 USC 103 as unpatentable over Goettmann is deemed to be overcome.

To complete the record, Applicants attach an Appendix containing the Applicants' technical comments which were discussed in detail with the Examiner during the personal interview. Should you have any questions, please do not hesitate to contact the undersigned.

Favorable action and allowance is solicited.

Respectfully submitted,

Takanori SHINOKI et al.

By: Warren M. Cheek, Jr.
Warren M. Cheek, Jr.
Registration No. 33,367
Attorney for Applicants

WMC/dlk
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
December 12, 2006